WHAT IS CLAIMED IS:

1. A diaphragm for a receiver, the receiver having a linkage assembly and an armature coupled thereto, the armature having a first inertial mass, the diaphragm comprising:

an attachment point for connectively coupling to the linkage assembly; and

a paddle, responsive to a movement of the linkage assembly, the paddle generally flat, having an upper surface and a lower surface, the paddle defining a plane, the paddle for creating sound pressure according to the movement of the linkage assembly, wherein the paddle has a second inertial mass such that momentum created by a movement of the armature is approximately equal to a momentum created by movement of the diaphragm.

2. The diaphragm of claim 1 wherein the paddle further comprises:

a first layer having a first upper surface and a first lower surface; and

a second layer having a second upper surface and a second lower surface, the second upper surface in contact with the first lower surface, wherein at least one of the layers is one of a metal and a composite.

3. The diaphragm of claim 2 wherein the paddle has an adhesive between the first and second layers.

4. The diaphragm of claim 2 wherein the metal is one of aluminum, titanium, tungsten, stainless steel, copper, brass beryllium copper and platinum.

5. The diaphragm of claim 2 wherein the first layer is thicker than the second layer.

6. The diaphragm of claim 2 wherein the first lower surface is larger than the second upper surface.

7. The diaphragm of claim 2 wherein the first upper surface is corrugated thereby increasing rigidity and raising a resonant frequency of the diaphragm.

8. The diaphragm of claim 1 wherein the paddle has an edge portion formed to be out of the plane thereby increasing rigidity and raising a resonant frequency of the diaphragm.

9. The diaphragm of claim 1 wherein the paddle is corrugated thereby increasing rigidity and raising a resonant frequency of the diaphragm.

10. The diaphragm of claim 1 wherein the paddle further comprises:

a first layer having a first upper surface and a first lower surface;

a second layer having a second upper surface and a second lower surface, and

a third layer having a third upper surface and a third lower surface, wherein the second upper surface in contact with the first lower surface, the second lower surface in contact with the third upper surface, wherein the second layer is one of a thermoplastic adhesive, a thermo set adhesive, a polyimide, and an epoxy.

11. The diaphragm of claim 10 wherein the second layer provides spacing between the first and third layer and the second layer is of a lower density than at least one of the other layers.

12. The diaphragm of claim 10 wherein a thickness of the first layer is between 10% and 200% of the thickness of the second layer.

13. The diaphragm of claim 1 wherein the resonant frequency of the diaphragm is above 7.5 KHz.

14. The diaphragm of claim 1 wherein the resonant frequency of the diaphragm is above 14 KHz.

15. A diaphragm for a receiver, the receiver having a linkage assembly and an armature coupled thereto, the armature having a first inertial mass, the diaphragm comprising:

an attachment point for connectively coupling to the linkage assembly; and

a paddle, responsive to a movement of the linkage assembly, the paddle generally flat, having an upper surface and a lower surface, the paddle defining a plane, the paddle for creating sound pressure according to the movement of the linkage assembly, wherein the paddle has a lowest frequency resonance greater than 7.5 KHz.

16. The diaphragm of claim 15 wherein the paddle further comprises:

a first layer having a first upper surface and a first lower surface; and

a second layer having a second upper surface and a second lower surface, the second upper surface in contact with the first lower surface, wherein at least one of the layers is one of a metal and a composite.

17. The diaphragm of claim 16 wherein the metal is one of aluminum, titanium, tungsten, stainless steel, copper, brass, beryllium copper and platinum.

18. The diaphragm of claim 15 wherein the paddle further comprises:

a first layer having a first upper surface and a first lower surface;

a second layer having a second upper surface and a second lower surface, and

a third layer having a third upper surface and a third lower surface, wherein the second upper surface in contact with the first lower surface, the second lower surface in contact with the third upper surface, wherein the second layer is one of a thermoplastic adhesive, a thermo set adhesive, a polyimide, and an epoxy.

19. The diaphragm of claim 18 wherein the second layer provides spacing between the first and third layer and the second layer is of a lower density than at least one of the other layers.

20. The diaphragm of claim 15 wherein a thickness of the first layer is between 10% and 200% of the thickness of the second layer.

21. A diaphragm for a receiver, the receiver having a linkage assembly and an armature coupled thereto, the armature having a first inertial mass, the diaphragm comprising:

an attachment point for connectively coupling to the linkage assembly; and

a paddle, responsive to a movement of the linkage assembly, the paddle generally flat, having an upper surface and a lower surface, the paddle defining a plane, the paddle for creating sound pressure according to the movement of the linkage assembly, wherein the paddle a lowest frequency resonance greater than 7.5 KHz and has a has a second inertial mass such that momentum created by a movement of the armature is approximately equal to a momentum created by movement of the diaphragm.

22. The diaphragm of claim 21 wherein the paddle further comprises:

a first layer having a first upper surface and a first lower surface; and

a second layer having a second upper surface and a second lower surface, the second upper surface in contact with the first lower surface, wherein at least one of the layers is one of a metal and a composite.

23. The diaphragm of claim 21 wherein the metal is one of aluminum, titanium, tungsten, stainless steel, copper, brass, beryllium copper and platinum.

24. The diaphragm of claim 22 wherein the first layer is thicker than the second layer.

25. The diaphragm of claim 22 wherein the first lower surface is larger than the second upper surface.

26. The diaphragm of claim 21 wherein the paddle is corrugated thereby increasing rigidity and raising a resonant frequency of the diaphragm.

27. The diaphragm of claim 21 wherein the paddle has an edge portion formed

to be out of the plane thereby increasing rigidity and raising a resonant frequency of the diaphragm.

28. The diaphragm of claim 21 wherein the paddle is corrugated thereby increasing rigidity and raising a resonant frequency of the diaphragm.

29. The diaphragm of claim 21 wherein the paddle further comprises:

a first layer having a first upper surface and a first lower surface;

a second layer having a second upper surface and a second lower surface, and

a third layer having a third upper surface and a third lower surface, wherein the second upper surface in contact with the first lower surface, the second lower surface in contact with the third upper surface, wherein the second layer is one of a thermoplastic adhesive, a thermo set adhesive, a polyimide, and an epoxy.

30. The diaphragm of claim 29 wherein the second layer provides spacing between the first and third layer and the second layer is of a lower density than at least one of the other layers.

31. The diaphragm of claim 29 wherein a thickness of the first layer is between 10% and 200% of the thickness of the second layer.

32. The diaphragm of claim 21 wherein the resonant frequency of the diaphragm is above 14 KHz.

33. A method of forming a paddle for use in a diaphragm of a receiver, the paddle having an inertial mass approximately equal to an inertial mass of an armature of the receiver and the diaphragm having a resonant frequency above an operational target, the method comprising:

providing a first layer, the first layer being substantially two dimensional and defining a first plane, the first layer being a material selected having a predetermined density and rigidity;

providing a second layer, the second layer being substantially two dimensional and defining a second plane, the second being a material selected to have a predetermined density and rigidity;

assembling the first layer to the second layer in a co-planar fashion forming the paddle, the paddle for creating sound pressure according to a movement of the armature, the paddle having an inertial mass approximately equal to the inertial mass of the armature and further having a resonant frequency above the operational target.

34. The method of claim 33 further comprising:

providing a third layer, the third layer being substantially two dimensional and defining a third plane, the third layer being less dense than the first layer;

assembling the third layer between the first and second layers forming the paddle, the third layer for increasing the rigidity of the paddle.

35. The method of claim 33 wherein the providing the third layer further comprises:

selecting a material for the third layer wherein the material enables paddle to have a lowest frequency resonance of at least 7.5 KHz.

36. The method of claim 33 wherein the providing the third layer further comprises:

selecting a material for the third layer wherein the thickness of the first layer is 10% to 200% the thickness of the third layer.